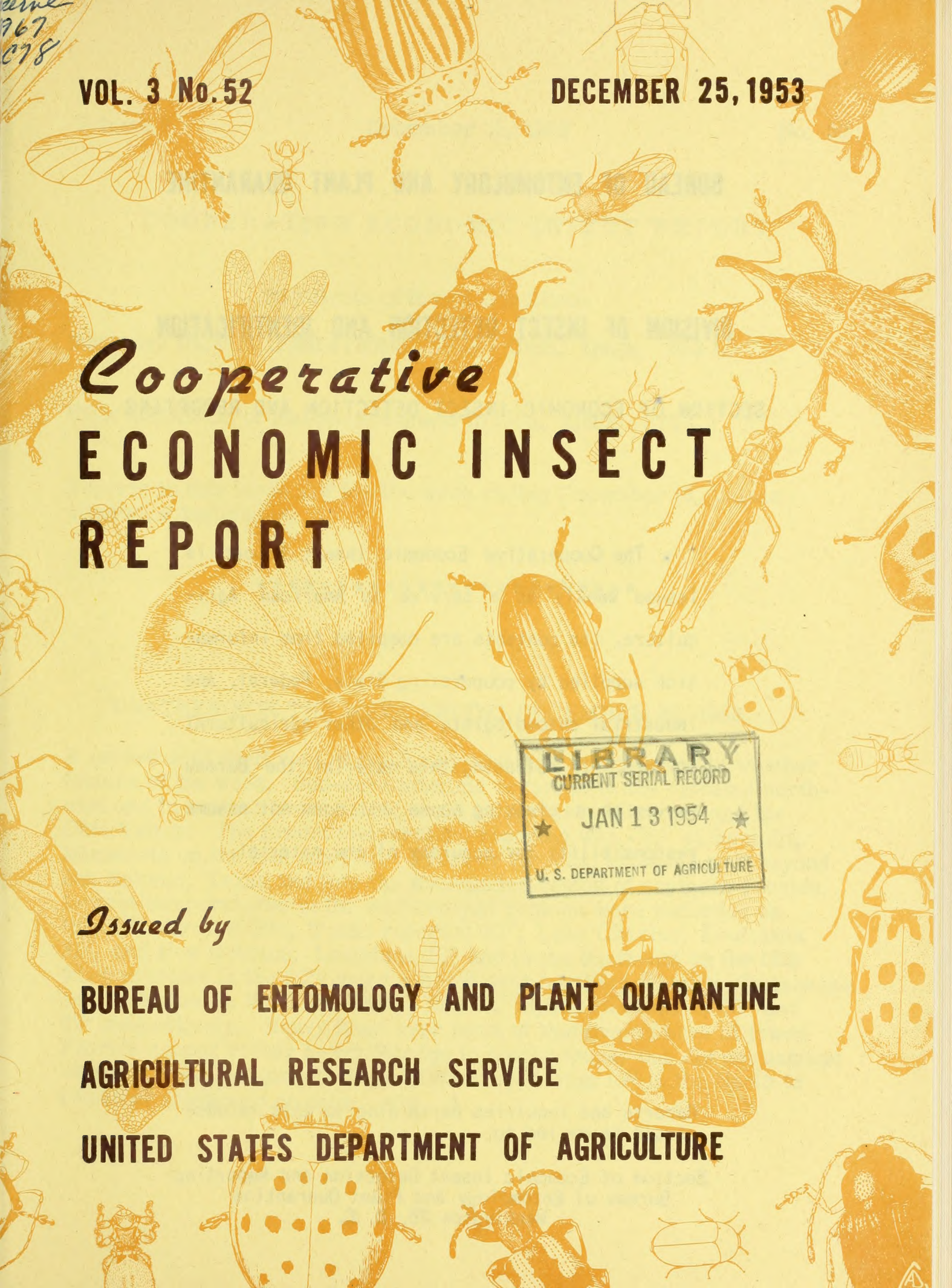
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

rne
767
C78

VOL. 3 No. 52

DECEMBER 25, 1953



Cooperative
ECONOMIC INSECT REPORT

LIBRARY
CURRENT SERIAL RECORD
★ JAN 13 1954 ★
U. S. DEPARTMENT OF AGRICULTURE

Issued by

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

DIVISION OF INSECT DETECTION AND IDENTIFICATION

SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Section of Economic Insect Detection and Reporting
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

Volume 3 December 25, 1953 No. 52

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

Summary INSECT CONDITIONS - 1953 - Utah. (page 863).

NEW RECORDS of insects in Canada in 1953. (page 870).

Reports in this issue are for the week ending December 18 unless otherwise designated.

****

WEATHER FOR THE WEEK ENDING DECEMBER 22, 1953

A severe cold spell east of the Rocky Mountains was the main weather feature of the week. Sub-zero mimima occurred in the extreme north-east and in central areas as far south as northern Missouri and the Ohio Valley. The lowest temperature reported was -29° at Bemidji, Minnesota on the 16th and 17th. Frost or freezing extended well beyond San Antonio, Texas and into the Everglades region of southern Florida. Lowest temperatures in the western gulf regions were recorded on the 15th when Del Rio, Texas reported 30°, Lake Charles, Louisiana 31°, and New Orleans, Louisiana 32° and in the Southeast on the 18th when mimima in the 20's were general over northern Florida (Tallahasse and Jacksonville 26°) and Tampa and Ft. Myers had lows of 36° and 38° respectively. Heavy frost over most of thefarming area of lower Florida caused rather heavy damage to tender truck, but did not damage citrus. In Georgia where mimima ranged from 10° in the North to

(Weather Continued on page 869).

CEREAL AND FORAGE INSECTS

A GRAIN MITE (Penthaleus major) - TEXAS - Continues to damage small grains in Kaufman, Van Zandt, Rockwall, Tarrant, Dallas, Johnson, Hill, McLennan and Falls Counties. Recent rains have affected populations very little. (Fuller, Garner, Davis.). Light local infestation on oats and small grains in Van Zandt County. (Berry).

Small Grain Pest Conditions, Panhandle, Texas: From November 3 to 25, a survey was made to determine small grain pest infestation in the Panhandle from Parmer and Castro Counties northward. Eighty-eight fields were inspected in 21 counties. Greenbug (Toxoptera graminum) was found in Moore and Randall Counties in very small numbers in large rank wheat. Corn leaf aphid (Rhopalosiphum maidis) and English grain aphid (Macrosiphum granarium) were found in a few fields. No spider mites were observed. (Daniels).

APHIDS - FLORIDA - Spotted light infestation of aphids on oats in Gadsden County area. (May).

CHINCH BUG (Blissus leucopterus) - TEXAS - Light widespread infestation on small grain in Van Zandt County. Grain 4-6 inches high. (Berry).

LEAFHOPPERS - Light widespread infestation on small grain in Van Zandt County. (Berry).

FIELD CRICKET (Acheta assimilis) - CALIFORNIA - Medium to light damage to alfalfa in Imperial County. (Coop. Ins. Pest Rpt., Nov.).

CORN EARWORM (Heliothis armigera) - CALIFORNIA - Light to heavy infestations in corn in Orange County. (Coop. Ins. Pest Rept., Nov.).

SALT-MARSH CATERPILLAR (Estigmene acrea) - CALIFORNIA - Medium damage to alfalfa in Imperial County. (Coop. Ins.Pest Rept.,Nov.).

FRUIT INSECTS

FALL CANKERWORM (Alsophila pometaria) - PENNSYLVANIA - Many moths on shade trees in Montgomery County and on apple trees in Schuylkill County. Heavy oviposition. (Menusan).

WOOLLY APPLE APHID (Eirosoma lanigerum) - WASHINGTON - Colonies of adults and small nymphs still living on apple terminals at Pullman, December 18. (Johansen).

GREEN PEACH APHID (Myzus persicae) - WASHINGTON - Few apterous individuals and very few eggs on peach terminals Nov. 23; no adults, but groups of 5-10 eggs in sheltered spots Dec. 18. (Johansen).

Citrus Pest Situation: CALIFORNIA - Citrus rust mite (Phyllocoptruta oleivora) generally light in San Diego County, though heavy in a few spots. Medium in parts of Orange County. Citrus red mite (Metatetranychus citri) light to heavy in Riverside County. Medium local infestations in Orange County. Heavy infestation of black scale (Saissetia oleae) on 100 untreated acres in San Diego County. Some medium infestations of California red scale (Aonidiella aurantii) on citrus in Orange County. Light on lemons in Santa Barbara County. (CIPR). TEXAS - A citrus mite infesting citrus fruits throughout lower Rio Grande Valley. (Griffith). FLORIDA - Citrus rust mite and citrus red mite are still the chief problem. (Pratt, Thompson, Johnson, Sec. Wk. Dec.).

SAN JOSE SCALE (Aspidiotus perniciosus) - TEXAS - Heavily infesting some peach orchards in Cherokee and Smith Counties. Apparently heaviest in orchards treated with arsenicals through the season. (Fuller, Davis, Hughes, Morris).

CODLING MOTH (Carpocapsa pomonella) - CALIFORNIA - Damage to walnuts increased in Stanislaus County. Damage to walnuts also in San Joaquin County. (Coop. Ins. Pest Rept., Nov.).

NAVEL ORANGEWORM (Myelois venipars) - CALIFORNIA - Up to 30 percent of walnuts infested in San Joaquin County. Damage increased in Stanislaus County. (Coop. Ins. Pest Rept., Nov.).

WALNUT HUSK FLY (Rhagoletis completa) - CALIFORNIA - Light to considerable damage to peaches in Riverside County. (Coop. Ins. Pest Rept., Nov.). Considerable damage to walnuts in Riverside County. (Coop. Ins. Pest Rept., Nov.).

TRUCK CROP INSECTS

LYGUS BUGS - TEXAS - Light to medium infestation on lettuce in the lower Rio Grande Valley. (Griffith).

BLACK VINE WEEVIL (Brachyrhinus sulcatus) - CALIFORNIA - Light to medium damage in strawberry fields in Santa Barbara County. (Coop. Ins. Pest Rept., Nov.).

ARTICHOKE PLUME MOTH (Platyptilia carduidactyla) - CALIFORNIA - Of increasing importance, infestations have ranged from medium to almost total damage to developing buds from Santa Barbara to San Mateo County. (Coop. Ins. Pest Rept., Nov.).

SALT-MARSH CATERPILLAR (Estigmene acrea) - CALIFORNIA - Medium damage to sugar beets in Imperial County. (Coop. Ins. Pest Rept., Nov.).

PEPPER WEEVIL (Anthonomus eugenii) - TEXAS - Medium infestation on bell peppers in Rio Hondo area, Cameron County. (Griffith).

CABBAGE LOOPER (Trichoplusia ni) - TEXAS - Light to medium infestation on cabbage in lower Rio Grande Valley. (Griffith).

PUSS CATERPILLAR (Megalopyge opercularis) - TEXAS - Light, local infestation on easter lilies in Harris County. (Hoermann).

APHIDS - CALIFORNIA - Cabbage aphid (Brevicoryne brassicae) light to heavy in cabbage fields in Orange and San Diego Counties. Light to medium on Santa Barbara County cole crops. Medium infestations in brussels sprouts in San Mateo County. (Coop. Ins. Pest Rept., Nov.). FLORIDA - Spotted heavy infestation of cabbage aphid on cabbage and collards in Gadsden County, Rather heavy infestation of turnip aphid (Rhopalosiphum pseudobrassicae) on turnips. (May).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - FLORIDA - Rather heavy infestation on turnips in Gadsden County area. (May).

FOREST INSECTS

SPIDER MITES - LOUISIANA - Camphor trees heavily infested in localized areas in New Orleans and vicinity. (Lott).

INSECTS AFFECTING MAN AND ANIMALS

CATTLE GRUBS (Hypoderma spp.) - UTAH - Infestation rather heavy in Washington County. Not many grubs present in northern area or at higher elevations as far as can be determined. (Knowlton, Dec. 7). TEXAS - Light to medium widespread infestation attacking cattle. Generally lighter than last year in Liberty, Jefferson, Hardin, Tyler, Polk and Madison Counties. (Davis). OKLAHOMA - Infestation being reported as heavier than usual throughout State. (Howell).

OTHER CATTLE PESTS-TEXAS - None to light infestation on cattle in Delta County. (Garner). OKLAHOMA - Lice heavier than usual throughout State. (Howell).

HOUSE FLY (Musca domestica) - FLORIDA - Recent warm days have increased populations in stock barns in Gadsden County area. (Guthrie).

BENEFICIAL INSECTS

CALIFORNIA - Parasites and polyhedral virus disease reported killing ALFALFA CATERPILLAR in San Joaquin County during the fall. (Coop. Ins. Pest Rept.).

MISCELLANEOUS INSECTS

A PSYLLID - LOUISIANA - A psyllid, thought to have bred on hackberry, has entered residences in New Orleans in large numbers creating a nuisance during recent weeks. (Lott).

RECENT IMPORTANT INTERCEPTIONS AT PORTS OF ENTRY

At this time of year, each ship that arrives at the Port of New York from the Mediterranean region brings with it passengers carrying fresh or semi-dry olives infested with the olive fruit fly, *Dacus oleae* (Gmel). On October 22nd, ninety pupae and ten adults were taken from a five pound shipment intercepted in passengers' baggage from Italy by Plant Quarantine Inspector Wehrle. This scourge of the olive industry is present in every country of the Eastern Hemisphere where olives are grown. The maggots are found burrowing in the fruit while the pupae and emerging adults may be found just under the skin of the olive or loose in the container. In the last five years, about 50 interceptions of this destructive tephritid have been made each year at Atlantic Coast ports. Another important pest, the olive moth, *Prays oleellus* (F), was intercepted recently by Plant Quarantine Inspectors Burnham and Maloney at New York's International Airport. Three living larvae were found with a five pound lot of olives from Italy in passenger's baggage. This hyponomeutid is intercepted about 5 times each year, only from Italy, Greece, and Lebanon so far. It is second in importance to the olive fruit fly as a pest of the olive crop. Only the second generation which feeds in the fruit and seed is intercepted. The first and third generations attack the flowers and leaves respectively.

Because of these and other pests, unpreserved olives are prohibited entry into the United States by quarantine and those fruits found in baggage are seized and burned. (Ramsay).

SUMMARY OF INSECT CONDITIONS - 1953

UTAH

Reported by G. F. Knowlton, H. E.
Dorst, F. V. Lieberman,
H. F. Thornley, and L. W. Orr

Cereal and Forage Insects: GRASSHOPPER and MORMON CRICKET outbreaks were unusually extensive and threatening during 1953. Control on range, farm and pasture lands included 101,300 acres sprayed or baited by aircraft, plus large areas treated by ground equipment. ALFALFA WEEVIL (*Hypera postica*) outbreak started out to be serious, but an extensive control program (possibly 35 percent of the alfalfa in Utah) of spring stubble spraying, plus rapid alfalfa growth which to quite an extent outgrew weevil damage, reduced losses to a point below normal. LYGUS BUGS (*Lygus elisus* and *L. hesperus* largely) were numerous and often damaging on alfalfa and clovers over much of the State, other than in Cache County. Where lygus bug control was delayed on second-crop alfalfa for seed in Millard, Beaver, Uintah, Duchesne and Tooele Counties severe bud damage resulted and few early blooms developed. YELLOW STRIPED ARMYWORMS (*Prodenia praefica* in northern Utah and *P. ornithogalli* in southern Utah) caused only scattered local damage this season; crop injury was less than had been anticipated. CLOVER LEAF WEEVIL (*Hypera punctata*) was more damaging than for a number of years, causing particular damage in Utah, Salt Lake, Davis and Box Elder Counties to alfalfa. BLISTER BEETLE populations in alfalfa generally were low. The PEA APHID (*Macrosiphum pisi*) spring outbreak was severe over a large area and necessitated approximately 30,000 acres of spring control in Davis, Salt Lake, Utah, Tooele and adjacent alfalfa areas. Summer pea aphid populations were unusually low, but fall populations in some instances became high on succulent irrigated alfalfa during late September and October. A few small spots of COWPEA APHID (*Aphis medicaginis*) infestation were noted. A few local infestations of ALFALFA CATERPILLAR (*Colias philodice eurytheme*) caused limited alfalfa injury. Sulfur butterflies were only moderately abundant this season, generally. Fall LEAFHOPPER populations often became high and conspicuous, especially of *Aceratagallia* spp. CORN EARWORM (*Heliothis armigera*) moths generally were scarce in blossoming alfalfa fields this season, as compared with the high population during 1952.

BROWN WHEAT MITE (Petrobia latens) caused injury to dryland wheat, and less to irrigated small grains, in several areas of the State. SAY STINK BUG (Chlorochroa sayi) generally was scarce on wheat, barley and oats, but control was necessary on alfalfa for seed in several Millard County areas. WHEAT STRAW-WORM (Harmolita grandis) occurrence was quite common in various counties, but WHEAT JOINTWORM (H. tritici) damage was greatest in the Erda-Lakepoint area of Tooele County. A LEAFHOPPER (Dikraneura carneola) and THRIPS were common and sometimes moderately injurious in scattered localities on small grains. Some CUTWORM damage to wheat occurred in a few wheat fields in Salt Lake and Tooele Counties in mid-March. Cutworm damage to wheat and alfalfa generally was below normal. Local areas of PALE WESTERN CUT WORM (Agrotis orthogonia) damage to dryland wheat occurred in San Juan, Utah and Salt Lake Counties; injury generally was below normal. The MITE (Aceria tulipae) that transmits the wheat streak mosaic virus was found to occur in Davis and Cache Counties on Agropyron smithii and A. repens grasses. One field of wheat was damaged by WHEAT STEM MAGGOT (Meromyza americana) and many heavy populations of FALSE CHINCH BUG (Nysius ericae) occurred in and about wheat fields, particularly adjacent to Russian-thistle or other weedy areas. ENGLISH GRAIN APHID (Macrosiphum granarium) and other aphid species were below normal, with little economic injury.

Fruit Insects: This was a season of unusual APHID populations. Extensive peach leaf curling occurred due to the GREEN PEACH APHID (Myzus persicae). Generally severe to moderate curling of plum and prune foliage was present, and aphid damage to many home apple, apricot and pear orchards occurred where control was inadequate. Fall aphid populations were very high during September and October on most fruit and berry crops examined in northern and central Utah. Seldom has such severe curling of entire peach orchards occurred as was frequently observed this season, even in leading fruit counties. A survey or prune orchards in Utah, Davis, Weber and Box Elder Counties showed economic damage to be fairly common from peach tree borer, aphids, mites and a prune leafhopper. BLACK CHERRY

APHID (*Myzus cerasi*) generally was a serious pest on sweet cherries--much more so this year than most seasons. PEAR-SLUG (*Caliroa cerasi*) injury also became severe in a great many orchards. CODLING MOTH (*Carpocapsa pomonella*) larvae damaged many small home apple and pear orchards. Berry pests included a common, often heavy infestation of the STRAWBERRY WHITEFLY (*Trialeurodes packardi*) wherever strawberry patches were examined in Cache, Box Elder, Weber, Salt Lake and Utah Counties. STRAWBERRY ROOT WEEVILS (*Brachyrhinus ovatus* and *B. rugosostriatus*) injury was common where control was neglected, with the BLACK VINE WEEVIL (*B. sulcatus*) infesting an occasional patch. STRAWBERRY LEAF ROLLER (*Ancylis comptana fragariae*) infestations were light to moderate with severe damage to foliage in a few patches. CURRANT APHID (*Capitophorus ribis*) caused serious leaf discoloration and foliage puckering generally over the State. Black currant, raspberries, boysenberries and dewberries commonly had moderate APHID infestations, with a very severe infestation on boysenberry foliage during fall in some Lehi and American Fork patches. A GRAPE LEAFHOPPER was damaging to susceptible varieties of grapes and to Virginia creeper foliage in various areas. WESTERN GRAPE LEAF SKELETONIZER (*Harrisina brillians*) caused less severe damage than in 1952. It was found to be parasitized by a tachina fly (*Sturmia harrisinae*) and preyed upon by a small yellowish robber fly(*Mallophorina pulchra*) which attacked the skeletonizer larvae, in the St. George-Washington area of Washington County. Some SPITTLEBUG (*Clastoptera lawsoni*) damage to grapes at Hurricane. Black currants commonly were infested by CURRANT FRUIT FLY (*Epochra canadensis*) larvae. Some GOOSEBERRY FRUITWORM (*Zophodia convolutella*) injury occurred to gooseberry and currant fruits. RASPBERRY ROOT BORER (*Bembecia marginata*) again caused some local injury in Davis County berry patches. MITES caused damage to raspberry foliage, and occasionally to strawberry patches in scattered areas. Mite damage generally was not above normal on berry crops.

Vegetable Insects: BEET LEAFHOPPER (*Circulifer tenellus*) population in the desert breeding areas of southern Utah, southern Nevada, southeastern California, southern Arizona and western Airzona in mid-February, 1953 averaged 0.04 per square foot in 217 stops at 10 mile intervals. General distribution of host plants occurred in 25 percent of the stops, no hosts occurred in 40 percent of the stops. The host plant area was 50 percent larger in 1952 and the average population also about twice as high. In the local breeding areas of northern Utah the population in 1953 was 0.023 per square foot and was the largest since 1950 when the average was 0.115. The viruliferous index of the leafhoppers in February and March averaged 14.5 compared to 10 percent in 1952. The migration from the southern breeding area to northern Utah was first detected April 22 and averaged 0.08 per square foot of beet row from Tremonton to Payson and 0.48 from Salina to Joseph. The population was about one ninth in magnitude compared to 1952 in the tomato growing area. Curly-top on tomatoes in Utah averaged about 6 percent with a range between 2 and 18 percent. In eastern Utah on sugar beets the populations averaged 2.5 per square foot and at harvest 75 percent obvious curly-top was present. TOMATO FRUITWORM (Heliothis armigera) infestation in tomatoes in 1953 was so small that insecticidal applications were not warranted. The egg population on tomato leaves during the time of the main fruit set averaged less than 0.01 egg per hundred leaves. CORN EARWORM (H. armigera) infestation on early market corn in northern Utah in July averaged about 2 percent. In canning corn in August and September the infestation increased to about 5 percent with a range between 0 and 15 percent. In southern Utah the infestation on market corn increased to about 20 percent with one or two fields as high as 75 percent. Approximately fifteen fields of tomatoes were reported with TOMATO RUSSET MITE (Vasates lycopersici) infestations in 1953. Some of the damage was severe. Very little tomato russet mite damage has been reported for the last two years in northern Utah. A VINEGAR FLY (Drosophila melanogaster) was approximately 40 percent as abundant in 1953 as compared to several other years.

APHID populations on celery and potatoes were below normal until fall, when large populations of fall migrants of many species were found to be present on the plants. Vegetable insects causing severe to moderate damage in Utah this season included cabbage aphid, imported cabbageworm; Mexican bean beetle; a leafhopper (Empoasca filamenta) on celery, potatoes, beans, and certain other garden plants; potato psyllid (Paratrioza cockerelli), thrips, flea beetles on potato, tomato, beets, turnips and radishes; root maggots in onions, radishes and turnips; onion thrips; pea aphid; aphids on beans, carrots (Cavariella aegopodii), turnips (Rhopalosiphum pseudobrassicae), sugar beet roots and tops, corn leaves and melons. Bean mosaic disease and damage was above normal in one area of Cache Valley. MITES often damaged bean foliage and severely damaged one field of corn at Provo, with moderate damage in occasional plantings. NITIDULID larvae and beetles again caused infestations, particularly to sweet corn in Emery, Grand, Washington, and Kane Counties; and to a lesser degree as far north as Utah and Salt Lake Counties. SIX SPOTTED LEAFHOPPER (Macrosteles fascifrons) sometimes became abundant on celery, decreasing in abundance by mid-September. HORNWORMS caused some damage to tomato and potato foliage, but only about 20 percent as much damage as occurred during 1952. Adult PEA WEEVIL (Bruchus pisorum) survived the winter in normal numbers and control was general to protect canning peas, except at higher elevation areas where weevils were not found. Pea weevils were common in garden peas. LOOPERS again did some damage to tomato, lettuce and pea foliage. SQUASH BUG (Anasa tristis) injury was common and about normal.

Insects Affecting Man and Animals: Horn fly, stable fly, house fly, cattle lice and cattle grub infestations and annoyance were common and approximately normal, throughout Utah. Tabanids caused severe annoyance in Rich County and much annoyance in a number of local areas over the State. Simuliidae and Heleidae were annoying locally in several areas. EARTICK (Otobius megnini) seems to continue spreading, causing some livestock injury in several large livestock areas. A few cases of fleeceworm infestation, grubs in the head of sheep, hog lice and mange in swine also were reported. POULTRY LICE and MITES were common in farm poultry houses, with an occasional case of FOWL TICK (Argas persicus) in southern Utah. MOSQUITOES were annoying in spring over large areas, and continued to be locally annoying from irrigation waste water breeding. Largest control operations were in Salt Lake, Weber, Box Elder, Davis, Green River and Moab areas. Mosquitoes frequently made farm work difficult and distressing to workers in parts of the Uintah Basin, with some river areas being especially bad. TERMITE damage occurred throughout the State, with many homes and buildings requiring control attention this season. WOODTICKS were fairly common on livestock and man in several range areas. EUROPEAN EARWIG (Forficula auricularia) invaded many homes.

Shade Tree Insects: ELM LEAF BEETLE (Galerucella xanthomalaena) injury was less severe than last season. The outbreak of NORWAY-MAPLE APHID (Periphyllus lyropictus) in northern and central Utah was the worst in many years. Cars parked under infested trees were severely coated with honeydew. APHID populations on many shade trees and ornamentals were very high during September, October and well into November. GREAT BASIN TENT CATERPILLAR again defoliated many willow and poplar trees and bushes along the Virgin River of Washington County, spots about nearby towns and even attacked brush on some range lands. Oystershell scale (Lepidosaphes ulmi) damaged willow, poplar, lilac, ash and other susceptible hosts throughout the state. PINE NEEDLE SCALE (Phenacaspis pinifoliae) was numerous on pine and spruce trees about many towns. BOXELDER BUG (Leptocoris trivittatus) populations generally were high. MITES caused damage to foliage of mountain ash, spruce and willow, in a number of localities.

Forest Insects: BLACK HILLS BEETLE (Dendroctonus ponderosae) continues in outbreak numbers on the Dixie National Forest and in Bryce Canyon National Park in the southern part of the State. An estimated 7375 ponderosa pine trees were attacked in the fall of 1953 and will require treatment in the spring of 1954. MOUNTAIN PINE BEETLE (D. monticolae) outbreak in lodgepole pine on the Wasatch and Ashley National Forests in eastern Utah is continuing in several local areas but not so extensively as was true two or three years ago. ENGELMANN SPRUCE BEETLE (D. engelmanni) is present in every area where spruce is being logged but few standing trees were attacked in 1953. An outbreak of a FIR NEEDLE MINER (Epinotia meritana) in white fir was brought under control at Bryce Canyon National Park by airplane spraying with DDT in 1952 and 1953.

Range Insects: Grasshoppers, Mormon crickets, false chinch bug and lygus bugs were among the most abundant injurious forms generally encountered on range lands. Beet leafhopper populations were lower than 1952, with Say stink bug and other injurious stink bugs being generally much less abundant than during 1952. Thrips, as usual, were extremely numerous on rabbit brush and certain other Compositae blossoms. Lepidopterous larvae caused some damage to foliage of snowberry and Artemisia spp. in some areas. Aphid populations at times were very high on certain plants. AN APHID (Hyalopteroides dactylidis) was found to be common and sometimes extremely abundant on orchard grass. It also was taken on a tall wheatgrass, a bluegrass, and on a slender wheatgrass. Sagebrush in northern Utah was severely defoliated in June by a webbing caterpillar (Aroga websteri).

Weather Continued:

near 20° near the Coast, vegetables, grains and pastures suffered moderate to substantial damage. Coastal truck in South Carolina and winter grains in northern Mississippi also suffered some damage from the hard freeze according to reports. In the Far West mild temperatures prevailed and weekly averages generally were a few degrees above normal, although at scattered Northern stations, the week was as much as 3° warmer than normal. Precipitation was light. Weekly totals exceeded an inch only along the Northern Pacific Coast and in the Central Gulf region. In the Far Southwest where most stations reported no precipitation at all, drought conditions continued. Wells and streams are still low in some central areas particularly in parts of the Ohio Valley, Missouri, scattered sections of Iowa and in southeastern Kansas. Snow and rain were falling in the mid-West at the end of the period and at least 4 inches of snow covered the ground in a belt extending from eastern Kansas to southern Michigan. Kansas City, Missouri and Flint, Michigan reported depths of 8 inches at 7:30 A. M. on December 22nd. Some snow fell as far south as western Texas and El Dorado reported 2 inches on the ground on the morning of the 22nd. (Summary Supplied by the U. S. Weather Bureau).

NEW RECORDS OF INSECTS IN CANADA - 1953

Reported by C. G. MacNay

The records listed herewith were made during 1953, but in all cases the specimens from which the records were made were collected in 1952 or earlier.

Insects New to North America

Insects recorded in this section had not previously been known to be present or established on this continent.

A severe infestation of the FLY Musca autumnalis Deg. was reported from Nova Scotia. The infestation occurred in the walls and interior of a church at Middleton, and was reported to have been present for at least three years. In a limited survey of the Annapolis Valley, N. S., the species was found in smaller numbers at Bridgetown, Lawrencetown, Victoria Vale, and intermediate points. The larvae develop in cow manure in the field. Adults feed on blood from wounds and on other surface exudations on mammals, but apparently do not puncture the skin. In late summer they enter buildings to hibernate. A WOOD-INFESTING WEEVIL, Pentarthrum huttoni Woll., was recorded from specimens that had been found in flooring in Quebec City, Quebec, in 1934. The insect occurs most commonly in flooring, but in Europe has been found also in the wood of chests and casks, and in one instance in the undecayed portion of a cherry tree when it was sawn into lumber. Adults of a small, black, lepidopterous insect, Monopis ferruginella Hbn., were found in thousands in a dwelling in Vancouver, British Columbia. It commonly feeds on fungi occurring in association with decaying vegetable matter, and although sometimes a considerable nuisance it is of minor economic importance.

A LEAFHOPPER, Macropsis fuscula (Zett.), was collected in considerable numbers on loganberry on Lulu Island, British Columbia. Raspberry growing nearby was not affected. This insect commonly feeds on wild and cultivated species of Rubus. Another species of the genus, M. trimaculata (Fitch), is a vector of the peach yellows virus.

Several specimens of the grasshopper Roeseliana roeselii (Hagenb.) were collected at Ville Saint-Laurent and Montreal, Quebec. The species is believed to have been brought to America from Europe by aircraft as the specimens were collected near Montreal airports.

A TORTRICID, Cnephasia virgaureana Tr., a pest of shrubs, vegetables, and other low plants, was recorded from St. John's, Nfld. This is the first known occurrence since 1916, when the species was collected in this area and erroneously named Tortrix oleraceana Gibson. The record suggests that the insect is established in the Province.

Insects New to Canada

Insects recorded in this section had not previously been known to be present or established in Canada, but were known to occur elsewhere in North America.

The TOMATO RUSSET MITE, Vasates lycopersici (Massee), appeared on tomatoes in a greenhouse near Harrow, Ontario. The PLANT BUG Irbesia arcuata Van D. caused considerable damage to Agropyron intermedium L. growing on the Lethbridge Experimental Station, Alberta. The only records in the United States are from Colorado, where it was collected in small numbers at altitudes of 8,000 ft. and higher. The GRASSHOPPER Psinidia fenestralis (Serv.) was recorded from one male specimen collected at Berthier, Quebec. The species occurs from Wisconsin eastward to the Atlantic coast in the United States, and inhabits sand dunes held by the American species of beach grass Ammophilia breviligulata Fern. The GRASSHOPPER Scudderia septentrionalis (Serv.) was recorded from two female specimens taken at Lachute, Quebec. The species occurs from Wisconsin eastward to the Altantic in the United States. Two species of aphids Cinara murrayanae (G. & P.) and C. juniperi deGeer were recorded. C. murrayanae was collected from the bark and smaller branches of lodgepole pine, Pinus contorta var. latifolia Engelm., at Hardisty, Alberta, and Indian Head, Saskatchewan. C. juniperi was collected from Juniperus communis L. at Sault Ste. Marie, Ontario. This species had been recorded in 1929 on juniper imported into British Columbia from Holland, but is not known to have been established in Canada at that time.

The FURNITURE CARPET BEETLE, Anthrenus flavipes Lec., was found in a house in Edmonton, Alta. The infestation was believed to have originated in furniture transported from Missouri, U. S. A., two years before. The FUNGUS-FEEDING BEETLE Thes bergrothi (Reitt.) was recorded at Ottawa from specimens collected in 1926 and in 1938 at Saskatoon, Sask. The specimens taken in 1938 were from hay packing in boxes of china imported from England some months earlier. The history of the specimens taken in 1926 is not known.